

WHAT IS CLAIMED IS:

- 1 1. A color image forming apparatus, comprising:
2 a plurality of image carriers for at least one color;
3 a plurality of developing devices, each developing a toner image onto
4 each image carrier;
5 a plurality of charging devices, each charging the each image carrier;
6 a first power source, connected to the developing devices in common;
7 a second power source, connected to the charging devices in
8 common; and
9 a controller, changing a process control of at least one of the charging
10 devices and the developing devices in accordance with a color image forming
11 operation and a monochrome image forming operation.
- 1 2. The color image forming apparatus as set forth in claim 1, wherein the
2 first power source includes a variable voltage DC power source and a variable
3 frequency AC power source.
- 1 3. The color image forming apparatus as set forth in claim 1, wherein the
2 second power source includes a variable voltage DC power source and a
3 variable voltage AC power source.
- 1 4. The color image forming apparatus as set forth in claim 1, wherein
2 each charging device includes either a roller charging mechanism or a brush
3 charging mechanism; and

4 wherein each developing device includes either a contact developing
5 mechanism or a non-contact developing mechanism.

1 5. The color image forming apparatus as set forth in claim 1, wherein
2 each charging device includes a roller charging mechanism; and
3 wherein each developing device includes a contact developing
4 mechanism.

1 6. The color image forming apparatus as set forth in claim 1, wherein
2 each charging device includes a brush charging mechanism; and
3 wherein each developing device includes a non-contact developing
4 mechanism.

1 7. The color image forming apparatus as set forth in claim 1, wherein the
2 process control includes at least one of a control of a charging bias voltage for
3 applying the charging devices and a control of a developing bias voltage for
4 applying the developing devices.

1 8. The color image forming apparatus as set forth in claim 7, wherein the
2 charging bias voltage includes either a DC voltage to be singly applied or an
3 alternating voltage superposed with the DC voltage.

1 9. The color image forming apparatus as set forth in claim 7, wherein the
2 developing bias voltage includes either a DC voltage to be singly applied or an
3 alternating voltage superposed with the DC voltage.

1 10. The color image forming apparatus as set forth in claim 7, wherein the
2 controller changes the control of the charging bias voltage so as to set a
3 voltage in the monochrome image forming operation higher than a voltage in
4 the color image forming operation.

1 11. The color image forming apparatus as set forth in claim 7, wherein the
2 controller changes the control of the developing bias voltage so as to set a
3 frequency of an alternating voltage in the monochrome image forming
4 operation higher than a frequency of an alternating voltage in the color
5 monochrome image forming operation.